10/677022

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*** YOU HAVE NEW MAIL ***

=> s (substrate or support) and polymer
L1      482170 (SUBSTRATE OR SUPPORT) AND POLYMER

=> s l1 and acrylamide(10a) 40
L2        1134 L1 AND ACRYLAMIDE(10A) 40

=> s l2 and 40%
L3        1134 L2 AND 40%

=> s l3 and 40% (5a) acrylamide
L4         721 L3 AND 40% (5A) ACRYLAMIDE

=> s l4 and reactive grup?
L5           0 L4 AND REACTIVE GRUP?

=> s l4 and reactive group?
L6          86 L4 AND REACTIVE GROUP?

=> s l6 and biomolecule
L7          13 L6 AND BIOMOLECULE

=> s l7 and covalent
L8          11 L7 AND COVALENT

=> dup rem l8
PROCESSING COMPLETED FOR L8
L9          10 DUP REM L8 (1 DUPLICATE REMOVED)

=> d l9 bib abs 1-10

L9   ANSWER 1 OF 10  WPIDS COPYRIGHT 2006       THE THOMSON CORP on STN
     DUPLICATE 1
AN   2005-283756 [29]   WPIDS
DNC  C2005-088137 [29]
DNN  N2005-232660 [29]
TI   Substrate, useful for immobilizing biomolecules such as nucleic
     acids and proteins, comprises a surface and a polymer that coats
     at least a portion of and being coupled to the surface
```

DC A14; A96; B04; D16; P32; P73
IN OFSTEAD R F; SWAN D G; SWANSON M J; OFSTEAD R; SWAN D; SWANSON M
PA (SURM-N) SURMODICS INC
CYC 107
PIA US 20050074478 A1 20050407 (200529)* EN 23[1]
WO 2005033158 A2 20050414 (200529) EN
EP 1668050 A2 20060614 (200641) EN
AU 2004278408 A1 20050414 (200656) EN
ADT US 20050074478 A1 US 2003-677022 20031001; EP 1668050 A2 EP 2004-789464 20040930; WO 2005033158 A2 WO 2004-US32443 20040930; EP 1668050 A2 WO 2004-US32443 20040930; AU 2004278408 A1 AU 2004-278408 20040930
FDT EP 1668050 A2 Based on WO 2005033158 A; AU 2004278408 A1 Based on WO 2005033158 A
PRAI US 2003-677022 20031001
AN 2005-283756 [29] WPIDS
AB US 20050074478 A1 UPAB: 20051222
NOVELTY - Substrate (I) comprises a surface (A) and a polymer (II) (comprising at least about 40 mol-% N-substituted acrylamide, N,N-disubstituted acrylamide , N-substituted methacrylamide and/or N,N-disubstituted methacrylamide; one or more pendant reactive groups configured to form covalent bond with biomolecule), which coats at least a portion of and being coupled to (A).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a composition (D) comprising (II);

(2) a method of attaching biomolecule to surface of (A) comprising providing (D) (where (II) is configured to be covalently attached to the surface coating and immobilizing (D) on the substrate surface); providing solution comprising biomolecule comprising one or more functional groups reactive with the reactive groups; applying an aliquot of the solution to the substrate surface; and forming covalent bonds between the reactive group and the functional group of the biomolecule; and

(3) a micro array comprising support surface; (II) (biomolecule covalently bound to the polymer in discrete spots) covalently coupled to the support surface.

USE - (I) is useful for immobilizing biomolecules such as nucleic acids and proteins.

ADVANTAGE - (I) is an improved form that provides a higher density of spots, retains sufficient hydrophilic character in an aqueous environment and provides solution phase reaction kinetics on the surface.

L9 ANSWER 2 OF 10 USPATFULL on STN
AN 2005:240469 USPATFULL
TI Stimuli-responsive hydrogel microdomes integrated with genetically engineered proteins for high-throughput screening of pharmaceuticals
IN Daunert, Sylvia, Lexington, KY, UNITED STATES
Deo, Sapna Kamlakar, Lexington, KY, UNITED STATES
Ehrick, Jason Douglas, Lexington, KY, UNITED STATES
Browning, Tyler William, Lexington, KY, UNITED STATES
Bachas, Leonidas G., Lexington, KY, UNITED STATES
PI US 2005208469 A1 20050922
AI US 2004-996068 A1 20041124 (10)
RLI Continuation-in-part of Ser. No. US 2001-905041, filed on 13 Jul 2001, PENDING
PRAI US 2000-218036P 20000713 (60)
DT Utility
FS APPLICATION
LREP MCDERMOTT WILL & EMERY LLP, 600 13TH STREET, N.W., WASHINGTON, DC, 20005-3096, US
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)

LN.CNT 1453
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A hydrogel microdome that can swell in response to a stimuli or target molecule is formed by polymerizing a mixture comprising a monomer capable of forming a hydrogel with a biopolymer. An array of hydrogel microdomes can be formed on a substrate by microspotting the mixture and polymerizing. The array can be used for high-throughput screening of analytes as well as for use as an actuator and biosensor using the swelling property of the hydrogel.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 10 USPATFULL on STN
AN 2005:88327 USPATFULL
TI Programmable and autonomous computing machine made of biomolecules
IN Shapiro, Ehud, House #33, Nataf, ISRAEL 90804
Benenson, Yaakov, Tel Aviv, ISRAEL
Adar, Rivka, Carmei Yosef, ISRAEL
Paz-Elizur, Tamar, Rehovot, ISRAEL
PI US 2005075792 A1 20050407
AI US 2004-493304 A1 20040503 (10)
WO 2002-IL915 20021114
PRAI US 2001-331318P 20011114 (60)
US 2002-386418P 20020607 (60)
DT Utility
FS APPLICATION
LREP Anthony Castorina, G E Ehrlich, Suite 207, 2001 Jefferson Davis Highway, Arlington, VA, 22202
CLMN Number of Claims: 49
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 1436
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A device, system and method for molecular computing which not only includes a suitable, renewable power source, but actually is able to receive power through the performance of the computations themselves. The molecular computing machine of the present invention actually employs the free-energy difference between its input and output to accomplish a computation, preferably by using its input DNA molecule as a partial source of energy, or alternatively by using the input DNA molecule as the sole source of energy. This molecular finite automaton preferably transforms an input DNA molecule into an output DNA molecule by digesting the input as it computes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 10 USPATFULL on STN
AN 2004:76228 USPATFULL
TI High affinity nanoparticles
IN Barry, Stephen E., Oakland, CA, UNITED STATES
Soane, David S., Piedmont, CA, UNITED STATES
PA Alnis BioSciences, Inc. (U.S. corporation)
PI US 2004058006 A1 20040325
AI US 2003-667635 A1 20030922 (10)
RLI Continuation-in-part of Ser. No. US 2001-809340, filed on 14 Mar 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-55837, filed on 26 Oct 2001, PENDING Continuation of Ser. No. US 1998-172921, filed on 14 Oct 1998, ABANDONED
PRAI US 2000-189625P 20000314 (60)
US 1997-61805P 19971014 (60)
US 1998-103616P 19981009 (60)
DT Utility
FS APPLICATION
LREP JACQUELINE S LARSON, P O BOX 2426, SANTA CLARA, CA, 95055-2426

CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1297
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB High affinity nanoparticles are provided, as well as methods for their synthesis and use. The nanoparticles of the invention comprise high affinity molecules incorporated in a polymeric nanoparticle. The high affinity nanoparticles range in size from about 1 to about 1000 nm. The high affinity molecules of the nanoparticle have moieties that have high affinity for target molecules, resulting in the ability of the high affinity nanoparticle to selectively non-covalently bind to molecular targets. The molecular recognition capability of these particles enables their use in research, diagnostic, therapeutic, and separation applications. The nanoparticles of the invention may be formed by contacting target template molecules with a set of building blocks (which includes the high affinity molecule as one subset of the building block set), which are then polymerized into a network. Removal of the templates yields a polymeric nanoparticle with three-dimensional binding sites that are complementary in shape to at least a portion of the target and including high affinity molecules chemically anchored on the surfaces of the binding sites. The high affinity nanoparticle is then capable of molecular recognition and selective binding to target molecules when presented with the target molecule in a mixture of molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 10 USPATFULL on STN
AN 2004:78923 USPATFULL
TI Microarrays and their manufacture
IN Anderson, Norman G., Rockville, MD, United States
Anderson, N. Leigh, Washington, DC, United States
PA Large Scale Proteomics Corporation, Vacaville, CA, United States (U.S. corporation)
PI US 6713309 B1 20040330
AI US 2000-482460 20000113 (9)
PRAI US 1999-146653P 19990730 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Chin, Christopher L.
LREP Tarcza, John E., Robbins, John C.
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 2108
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The microarrays of the present invention are prepared by using a separate fiber for each compound being used in the microarray. The fibers are bundled and sectioned to form a thin microarray that is glued to a backing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 10 USPATFULL on STN
AN 2003:219711 USPATFULL
TI Molecular compounds having complementary surfaces to targets
IN Soane, David S., Piedmont, CA, UNITED STATES
Barry, Stephen E., Oakland, CA, UNITED STATES
Goodwin, Andrew, Oakland, CA, UNITED STATES
Offord, David A., Castro Valley, CA, UNITED STATES
Perrott, Michael G., San Francisco, CA, UNITED STATES
PA Alnis, LLC (U.S. corporation)
PI US 2003153001 A1 20030814

PI US 6884842 B2 20050426
AI US 2001-55837 A1 20011026 (10)
RLI Continuation of Ser. No. US 1998-172921, filed on 14 Oct 1998, ABANDONED
PRAI US 1997-61805P 19971014 (60)
US 1998-103616P 19981009 (60)
DT Utility
FS APPLICATION
LREP JACQUELINE S LARSON, P O BOX 2426, SANTA CLARA, CA, 95055-2426
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN 29 Drawing Page(s)
LN.CNT 3672
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Synthetic polymer complements (SPCs) are provided, as well as methods for their synthesis and use. The SPCs may have surfaces that include functional groups that are complementary to surface sites of targets such as nanostructures or macromolecular targets, and may be capable of specifically interacting with such targets. The positions of the functional groups in one embodiment are stabilized by a polymer network. The SPCs are formed by contacting the target with a set of monomers which self-assemble on the target, and then are polymerized into a network to form the synthetic polymer complement. At least a portion of the surface of the resulting SPC thus may include an imprint of the target. The complex of the SPC and the target may be the desired product. Alternatively, the target is released, for example, by controllably expanding and contracting the crosslinked network. The SPC is isolated and used in many applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 10 USPATFULL on STN
AN 2002:133444 USPATFULL
TI Multimeric biopolymers as structural elements and sensors and actuators in microsystems
IN Madou, Marc, San Diego, CA, UNITED STATES
Bachas, Leonidas G., Lexington, KY, UNITED STATES
Daunert, Sylvia, Lexington, KY, UNITED STATES
PI US 2002068295 A1 20020606
AI US 2001-905041 A1 20010713 (9)
PRAI US 2000-218036P 20000713 (60)
DT Utility
FS APPLICATION
LREP CALFEE HALTER & GRISWOLD, LLP, 800 SUPERIOR AVENUE, SUITE 1400, CLEVELAND, OH, 44114
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 939
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Biomolecular complexes, hereinafter referred to a mulimeric biopolymers which can be used as the foundation of chemical control systems capable of both sensing the presence of a target analyte and actuating some mechanical response. The biomolecular complexes are multimeric biopolymers comprising at least two monomeric units. The monomeric units are selected from the group consisting of full-length proteins, polypeptides, nucleic acid molecules, and peptide nucleic acids. At least one of the monomeric units binds to the target analyte. In one highly preferred embodiment the multimeric biopolymers of the present invention undergo a detectable conformational change in response to exposure to an analyte. The present invention also provides micromachined and nanomachined devices and systems which employ the multimeric biopolymers to sense the presence of a target analyte, to actuate a response to the presence of a target analyte, or to perform both functions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 10 USPATFULL on STN
AN 2001:205574 USPATFULL
TI Microarrays and their manufacture
IN Anderson, Norman G., Rockville, MD, United States
Anderson, N. Leigh, Washington, DC, United States
PI US 2001041339 A1 20011115
US 6887701 B2 20050503
AI US 2001-880019 A1 20010614 (9)
RLI Division of Ser. No. US 2000-482460, filed on 13 Jan 2000, PENDING
PRAI US 1999-146653P 19990730 (60)
DT Utility
FS APPLICATION
LREP ROYLANCE, ABRAMS, BERRO & GOODMAN, L.L.P., 1300 19TH STREET, N.W., SUITE 600, WASHINGTON,, DC, 20036
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 2244
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The microarrays of the present invention are prepared by using a separate fiber for each compound being used in the microarray. The fibers are bundled and sectioned to form a thin microarray that is glued to a backing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 9 OF 10 USPATFULL on STN
AN 2001:196797 USPATFULL
TI Methods and compositions for determining the sequence of nucleic acid molecules
IN Van Ness, Jeffrey, Seattle, WA, United States
Tabone, John C., Bothell, WA, United States
Howbert, J. Jeffry, Bellevue, WA, United States
Mulligan, John T., Seattle, WA, United States
PA Qiagen Genomics, Inc., Bothell, WA, United States (U.S. corporation)
PI US 6312893 B1 20011106
AI US 1997-898180 19970722 (8)
RLI Continuation-in-part of Ser. No. US 1997-786835, filed on 22 Jan 1997, now abandoned
PRAI US 1996-10462P 19960123 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Houtteman, Scott W.
LREP Seed Intellectual Property Law Group PLLC
CLMN Number of Claims: 58
ECL Exemplary Claim: 1
DRWN 46 Drawing Figure(s); 42 Drawing Page(s)
LN.CNT 6431
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compounds, including compositions therefrom, are provided for determining the sequence of nucleic acid molecules. The methods permit the determination of multiple nucleic acid sequences simultaneously. The compounds are used as tags to generate tagged nucleic acid fragments which are complementary to a selected target nucleic acid molecule. Each tag is correlative with a particular nucleotide and, in a preferred embodiment, is detectable by mass spectrometry. Following separation of the tagged fragments by sequential length, the tags are cleaved from the tagged fragments. In a preferred embodiment, the tags are detected by mass spectrometry and the sequence of the nucleic acid molecule is determined therefrom. The individual steps of the methods can be used in automated format, e.g., by the

incorporation into systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 10 OF 10 USPATFULL on STN
AN 1998:69027 USPATFULL
TI Method for making improved heparinized biomaterials
IN Cahalan, Patrick, Geleen, Netherlands
Lindhout, Theo, Gronsveld, Netherlands
Fouache, Benedict, Maastricht, Netherlands
Verhoeven, Michel, Maastricht, Netherlands
Cahalan, Linda, Geleen, Netherlands
Hendriks, Marc, Hoensbroek, Netherlands
Blezer, Ron, Maastricht, Netherlands
PA Medtronic, Inc., Minneapolis, MN, United States (U.S. corporation)
PI US 5767108 19980616
AI US 1995-518147 19950822 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Peselev, Elli
LREP Latham, Daniel W., Patton, Harold R.
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 476
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of treating a patient with a medical device having immobilized heparin on a blood-contacting surface in which the covalently attached heparinized surface is provided with an adsorbed protein which may be activated by the immobilized heparin to block the coagulation of fibrinogen. Antithrombin III is the preferred adsorbed protein. The adsorbed protein is maintained on the immobilized heparin surface until the medical device is placed into contact with the patient's blood. When in contact with the patient's blood, the adsorbed protein will prevent initial thrombin formation at the biomaterial-blood interface. The preadsorption of ATIII is accomplished under conditions advantageous to maximum heparin/ATIII binding. When the preadsorbed surface comes in contact with whole blood, the maximum advantage of prophlactic properties of ATIII/heparin are obtained.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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